



Illinois Department of Transportation

Office of the Secretary
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TO THE HONORABLE MEMBERS OF THE 98th GENERAL ASSEMBLY

**SUBJECT: Public Act 96-0037 Progress on the Installation of Fiber-Optic
Network Conduit**

The Illinois Department of Transportation (IDOT) has been working with the Illinois Department of Central Management Services (CMS) to ensure affordable high-speed, world-class core information and communication networks are available throughout Illinois as required by Illinois Public Act 96-0037.

During the 2010 legislative session, the legislature addressed the issue that parts of Illinois lacked access to high-speed information and communication (broadband) networks. To address this and encourage network development throughout Illinois, the legislature enacted legislation that included having IDOT and CMS collaborate to install fiber-optic network conduit in state-funded construction projects along state-owned infrastructure. IDOT or CMS may then be able to lease fiber and/or empty conduit to any third party entity to complete broadband networks to underserved areas in Illinois.

To comply with this, IDOT began to develop a draft policy and special provisions for contracts to handle the fiber-optic conduit installation. As work progressed in developing these documents, CMS and other public and private groups were awarded federal grants under the American Recovery and Reinvestment Act (ARRA) program to develop and build broadband networks. These grants were issued during spring and summer 2010. To further their collaboration, these groups that were awarded federal grants are part of the Illinois Broadband Opportunity Partnership (IBOP).

After reviewing the scope of these IBOP proposals, it became clear that the network being constructed by these partnerships is huge and, once implemented, will cover a large portion of the state of Illinois. It also became clear that many of these projects will be installing fiber-optic cable on IDOT right of way. As a result, IDOT has shifted its focus to supporting the implementation of these regional initiatives and has begun the process of coordinating with CMS and others in processing permits that will allow installation of fiber-optic cables on IDOT right of way. The current estimate of these projects is to install over 3,000 miles of fiber-optic cable within Illinois by early to mid 2013.

As a long-term strategy, IDOT is working with CMS to identify "gaps" in this emerging network and identify which of our planned road and bridge projects are potential candidates for installation of fiber-optic network conduit. In identifying potential projects, IDOT has been investigating to determine need and logical termini based on the following criteria:

- Is there an existing high-speed network anywhere along the corridor?
- Is there a demonstrated need for a broadband network along the corridor? This requires looking at:
 1. Population centers currently without a broadband network.
 2. New population growth or development.
- Is the corridor a candidate for the department's Intelligent Transportation System application?

While there are no projects that were completed in FY 2011 that included state-funded construction of fiber-optic conduit, a project was started on a route between Morton and Bloomington. Additionally, plans were developed for a route between Macomb and Moline. In coordination with CMS, two other routes have been preliminarily identified to include this conduit in future projects. These other routes are Robinson to Effingham and Alton to Jacksonville. There was some work done prior to 2010 that included IDOT constructing and subsequently leasing parts of a 26-mile long fiber-optic cable along I-39, bridging a gap between Rochelle and Rockford. Additionally, a permit was issued in 2000 to a private company to install fiber-optic cable along 292 miles of state highway in which the state received a number of fibers in the cable for its own network purposes. These fibers are currently under the control of CMS and are included within the IBOP program.

The department has compiled the enclosed summation showing the currently constructed fiber-optic cable and spare duct along with an estimate of the work expected to be completed through 2014. This will be updated annually.

Thank you for your interest in the Illinois transportation system. If you have any questions or need additional information, please contact me.



Ann L. Schneider
Secretary

Enclosure

Constructed Fiber Optic Cable and Spare Duct

All lengths are in miles

	1999-2009	2010	2011	2012	2013 ²	2014 ²
<u>Fiber Optic Cable ¹</u>						
IDOT						
ITS (w/ Federal funds)	120.1	9.4	8.3	29.4	15.0	12.2
ITS (State only funded)	26.3	0.0	6.3	4.4	13.0	0.0
Lease (I-39)	26.3	0.0	0.0	0.0	0.0	0.0
IBOP ³						
CMS				0	1088	
Clearwave				407	333	
iFiber (NIU)				292	578	
UC2B (U of I)				18	169	
DATA (DeKalb Co.)				110	17	
Other Partnership Permits						
Williams (I-55) ⁴	292.0					
SSMMA				0	27	
IRHN					1	
<u>Spare Inner-duct (w/ above fiber optic cable)</u>						
IDOT						
ITS (w/ Federal funds)	28.5	0	0	27.3	0	
ITS (State only funded)		0	0	0	26.0	
<u>Spare/extra duct/conduit (in addition to above)</u>						
IDOT						
ITS (w/ Federal funds)		0	5.8	10.1	0	
ITS (State only funded)		0	0	0	0	
<u>Leased/service-traded facilities</u>						
Fibers on I-39 (# of strands)	36	0	4	4	2	
Inner-duct/conduit (miles)						

NOTES:

1. Does not include projects to interconnect traffic signals.
2. Numbers shown are estimates based on bid documents or project descriptions.
3. Includes all fiber optic cable segment miles; not limited to state right-of-way.
4. Currently known as "Level 3" and installed under permit in 2000. Eight dark fibers were given to CMS by IDOT.

SSMMA = South Suburban Mayors and Managers Association

IRHN = Illinois Rural Health Net